

An Essay

on the

Pathology of the Lymphatics

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The lymphatic vessels, (or absorbents as they are sometimes styled) receive their name from a greek word signifying water, from the watery or limpid fluid which they convey.

They are very minute and delicate, remarkable for their uniformity of size, a knotted appearance, and their

frequent division into
pairs

They have a structure according to Kolliker, similar to that of the veins, viz., an external, middle, and internal coat, or tunica, within which the circulation is performed by the aid of numerous valves, (which give to the vessels their peculiar knotted appearance,) similar to the circulation in the venous system.

Connected with the circulatory system of the lymphatic vessels, are

numerous small oval or rounded bodies, of a pale red color, called lymphatic or conglobate glands, which are composed of a ramification of minute lymphatic and capillary blood vessels held together, and enclosed by a comparatively dense mass of areola tissue.

Owing to their extreme minuteness (with the exception perhaps of the thoracic duct) the study of the Pathology of the lymphatic system is extremely difficult and unsatisfactory, especially

of the superficial vessels,
With these few introductory
remarks we will proceed
directly to the consideration
of the special Pathology
of the lymphatic system,
which will be considered
under the several heads of,
Inflammation, Gangrene,
Hypertrophy, Dilatation,
Tubercle, Carcinoma, Melanosis, &c,

First Inflammation

Like other inflammation,
inflammation of the lym-
phatics is characterized
by pain, redness, heat, and
swelling along the course

of the inflamed vessel,
The color of the coats of
the vessel in the simple,
and commencement of the
more serious forms, is of
a light reddish tint

Resolution is the most
frequent and favorable
form of termination: but
sometimes the color changes
to a violet or more com-
monly to a deep red, or
purple color; and as the
inflammation advances, the
proper nutrient vessels
become engorged with blood,
the surrounding areola
tissue becomes involved,

serum is exuded, and we have the formation of an abscess

Pus is also sometimes found in a vessel as a foreign substance, by mere absorption from an abscess in the immediate vicinity

Acute inflammation in the glands is of very common occurrence. In these cases the gland enlarges, sometimes as large as a large orange, and very often terminates in suppuration; as for instance in the inguinal and axillary regions

Second Gangrene

Acute inflammation also sometimes terminates in gangrene, when immense sloughs are formed, as in cases of syphilitic buboes, occurring in debauched and worn-out habits.

Third Hypertrophy

Hypertrophy of the lymphatic glands is sometimes the result of chronic inflammation; sometimes the primary cause is seated in their own tissue, and sometimes it may arise from an irritation

communicated to them
from the surrounding
tissues, viz., in the mesen-
teric glands from an irita-
tion in the bowels, in the
axillary glands, from an
irritation in the breast,
in the inguinal glands,
from an irritation in
the penis, &c.

In these conditions
their color is various
as white, grey, or of a
yellowish or brownish
tint, sometimes of a dense
or gristly hardness, grating
sensibly under the knife.
Sometimes in this

condition they so obstruct the process of nutrition as to cause emaciation and death; and Dr. William Hunter mentions an instance in which the internal iliac glands were so enlarged, as to cause death by preventing the descent of the child's head during the process of parturition.

Fourth Dilatation.

A remarkable dilatation of the lymphatic vessels is sometimes

observed, giving them a varicose or tortuous arrangement, and the resulting tumors when examined present a spongy appearance, the size of all the vessels being enlarged, not unlike the varicose arrangement of the venous system

Fifth Tubercle

Of all parts of the human system, few are, perhaps, more liable to the deposition of tuberculous matter, than the lymphatic glands

It is deposited in the gland substance in yellowish masses and liable to all the changes that tubercular deposition elsewhere undergoes, and in one instance in my dissections I observed that the glands of the axilla were converted completely into a calcareous substance tubercular matter having been deposited cretification ensued

Children are particularly prone to a glandular tubercular deposit

Dr Lombard found

that of one hundred
post mortem examinations
of tuberculous children,
the several glands were
affected as follows, viz.
bronchial, eighty seven,
mesenteric, thirty one,
cervical, seven, and in-
guinal, three,

Sixth Carcinoma
There is probably
no part of the human
economy so liable to
the deposition of sec-
ondary cancerous deposits,
as that of the lymph-
atic glands, The reason

of this is obvious. In cases of cancerous habits, the cancer blastema may be absorbed from the affected organ, transferred by the lymphatics to a gland in the vicinity, there becoming entangled in the minute ramifications of the vessels, thus as it were becoming the exciting cause of a fresh deposition of cancerous matter in the new location; and in this way I think we may account for some forms of cancerous

cachexia especially in the
more advanced stages

Seventh Melanosis

Melanosis is some-
times an affection with
which the glandular
system is often com-
plicated, more especially
those which are in close
proximity to the respi-
ratory apparatus

It is not probably
a morbid process of
itself, but more properly
speaking, a proof of
the depuratory powers

of the glands by which
they assist in the
purification of the blood

There are also other
pathological conditions
of the lymphatic system,
but as they are of minor
importance, and as time
and space will not
permit me to enlarge,
I will close, hoping these
few, brief notices, will
suffice the object for
which they were written